Message

From: Post, Gloria [Gloria.Post@dep.nj.gov]

Sent: 12/18/2018 5:02:48 PM

To: John Washington [j Ex. 6 Personal Privacy (PP) ; Washington, John [/o=ExchangeLabs/ou=Exchange

Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fdc3e8ce9f1d45c4894881ff420ca104-Washington,

John]

Subject: RE: NJ study

Thanks John! I hope you are enjoying your time off! Merry Christmas and Happy New Year to you!

From: Ex. 6 Personal Privacy (PP)

Sent: Tuesday, December 18, 2018 12:01 PM

To: Post, Gloria <Gloria.Post@dep.nj.gov>; Bergman, Erica <Erica.Bergman@dep.nj.gov>; Washington, John

<Washington.John@epa.gov>

Cc: Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>

Subject: [EXTERNAL] NJ study

Hello,

I am on annual leave this week, but thought it worth mentioning: I think at one point one of you mentioned that Solvay suggested that PFNA was too large and heavy of a molecule to travel far in the atmosphere in a plume from a stack.

You might remember from my presentation that I showed a relationship between how far a congener was dispersed in the soil samples with congener mass. One of the two smallest congeners in this graph, and the one that plotted as most widely dispersed in this graph, and the congener that was present in every soil sample I received from New Jersey for this study was the ethyl, propyl = 0,1.

Well the molecular anion mass of the 0,1 congener is 461 Daltons and the molecular anion mass of PFNA is 463 Daltons. So PFNA mass is almost equal in mass to the most widely dispersed polyether congener which was present in every soil sample.

Hope you have a great Christmas and New Year, John

From: Post, Gloria < Gloria.Post@dep.nj.gov>
Sent: Monday, December 17, 2018 10:29 AM

To: Bergman, Erica; Washington, John; John Washington

Cc: Goodrow, Sandra

Subject: Re: NJDEP visit: Final Agenda and Visitor Lot Location

The table that Erica sent also includes their yearly use of NaPFO. I believe Solvay said that this is a very pure form of PFOA.

Gloria B. Post, Ph.D., DABT Research Scientist

Division of Science and Research New Jersey Department of Environmental Protection Mail Code 428-01, PO Box 420 Trenton, NJ 08625-0420

Telephone: (609) 292-8497

Fax: (609) 292-7340

From: Bergman, Erica

Sent: Monday, December 17, 2018 10:27:54 AM **To:** Washington, John; Post, Gloria; John Washington

Cc: Goodrow, Sandra

Subject: RE: NJDEP visit: Final Agenda and Visitor Lot Location

John,

I also have this letter that Roux Environmental sent in 2013 with a similar table showing emissions, but it goes back to 1991 and it was not marked CBI, so it's part of the public record.

I think we can assume 2010 was the start of using the polyether compound based on the decreased emissions of SURFLON that same year.

Erica Bergman

New Jersey Department of Environmental Protection Site Remediation Program – Bureau of Case Management 401 E. State Street - Mail Code 401-05F P.O. Box 420 Trenton, NJ 08625-0420 erica.bergman@dep.nj.gov

609-292-7406

From: Washington, John < Washington. John@epa.gov >

Sent: Monday, December 17, 2018 9:49 AM

To: Bergman, Erica < Erica. Bergman@dep.nj.gov >; Post, Gloria < Gloria. Post@dep.nj.gov >; John Washington

Ex. 6 Personal Privacy (PP)

Cc: Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>

Subject: [EXTERNAL] Re: NJDEP visit: Final Agenda and Visitor Lot Location

Thanks Erica and Gloria,

I wanted the date that they started with the new polyether compounds so I could estimate a rate of discharge from the stack of these compounds based on the soil concentrations. The values reported in the CBI are larger than my conservative draft estimates, which likely will change with refinement.

John

From: Bergman, Erica < Erica.Bergman@dep.nj.gov > Sent: Monday, December 17, 2018 9:28:02 AM To: Post, Gloria; Washington, John; John Washington

Cc: Goodrow, Sandra

Subject: RE: NJDEP visit: Final Agenda and Visitor Lot Location

Gloria is correct, Solvay phased out SURFLON use in 2010, by then they were using only a fraction of what they had been using in years previous. See attached and scroll down to second page showing Solvay's emissions table, it only goes back to 2000, but they reported usage back to 1985. Note that Solvay has asked DEP to keep these pages confidential. Also attached is Solvay's commitment letter to EPA's phase out program.

Erica Bergman

New Jersey Department of Environmental Protection Site Remediation Program – Bureau of Case Management 401 E. State Street - Mail Code 401-05F P.O. Box 420 Trenton, NJ 08625-0420 erica.bergman@dep.nj.gov 609-292-7406

From: Post, Gloria < Gloria.Post@dep.nj.gov > Sent: Sunday, December 16, 2018 9:54 PM

To: Washington, John <Washington.John@epa.gov>; Bergman, Erica <Erica.Bergman@dep.nj.gov>; John Washington

Ex. 6 Personal Privacy (PP)

Cc: Goodrow, Sandra <Sandra.Goodrow@dep.nj.gov>

Subject: Re: NJDEP visit: Final Agenda and Visitor Lot Location

John,

Solvay did not use PFOS. They used a mixture (Surflon) of perfluorinated carboxylates that was >70%PFNA and also contained C11 and C13.

I believe they had stopped using Surflon (PFNA, C11, C13) in 2010, and they had switched to the replacement you mentioned at that time. However, I am not sure if they had started using the replacement prior to 2010 before they had totally phased out the Surflon (PFNA etc)

Erica may have something to add to what I wrote here.

Gloria

Gloria B. Post, Ph.D., DABT Research Scientist

Division of Science and Research New Jersey Department of Environmental Protection Mail Code 428-01, PO Box 420 Trenton, NJ 08625-0420 Telephone: (609) 292-8497

Fax: (609) 292-7340

From: Washington, John < Washington. John@epa.gov>

Sent: Sunday, December 16, 2018 9:43:23 PM **To:** Bergman, Erica; Post, Gloria; John Washington

Subject: [EXTERNAL] Re: NJDEP visit: Final Agenda and Visitor Lot Location

Hi Erica and Gloria,

Can either of you tell me again when you think Solvay switched away from using PFOS to using the new Cl perfluoro polyether compounds??

I am on annual leave so not checking work email as commonly, so if you could reply to all, I would see your email earlier.

Thanks!

John

From: Bergman, Erica < Erica.Bergman@dep.nj.gov > Sent: Friday, November 30, 2018 3:09:43 PM

To: Buckley, Timothy; Lindstrom, Andrew; Strynar, Mark; Washington, John

Cc: Goodrow, Sandra

Subject: NJDEP visit: Final Agenda and Visitor Lot Location

All,

Please see attached:

- Final agenda
- See map showing the location of the visitor's lot, access it by going around the back of the building (on the map it looks like you are driving through trees, but there is actually a road there!). On Tuesday, our meeting will be held at 428 East State St., Trenton. From the visitor lot, you will cross E. State Street and find the entrance to the building on Carroll St. (see red arrow on map).

On Wednesday, we will be meeting at the main DEP building at 401 East State St. When you enter the lobby, you will check in with the guard to receive badges; they will contact me and I will come down to meet you.

We look forward to meeting with you and having a great discussion on PFAS! Please reach out if you have any questions.

Contact info:

Work: 609-292-7406

Cell: 609-937-1404

Erica Bergman

New Jersey Department of Environmental Protection Site Remediation Program – Bureau of Case Management 401 E. State Street - Mail Code 401-05F P.O. Box 420 Trenton, NJ 08625-0420 erica.bergman@dep.nj.gov 609-292-7406